

HUMAN CAPITAL DEVELOPMENT OF COMMUNITY ENTERPRISES IN THE SUFFICIENCY ECONOMY LAND SETTLEMENTS, AGRICULTURAL REFORMED AREAS OF THAILAND*

Khemapat Yenpiam et al.**

Faculty of Humanities and Social Sciences
Suan Dusit Rachabhat University, Thailand

Email: dr.khim_4@hotmail.com

ABSTRACT

The research on Human Capital Development of Community Enterprises in the Sufficiency Economy Land Settlements, Agricultural Reformed Areas aims at: 1) studying the contexts of community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land; 2) studying the human capital development of community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land; 3) studying factors affecting the human capital development of community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land; 4) studying the human capital development approach of community enterprises in the sufficiency economy land settlements, agricultural reformed land; and 5) studying factors/conditions allowing the practical implementation of human capital development of community enterprises in the sufficiency economy land settlements, agricultural reformed areas. This research was conducted on the qualitative approach relying on documents, articles, related researches, in-depth interview with key informants, and focus group. The results showed that the factors influencing the human capital development of community enterprises in the sufficiency economy land settlements may be classified into external and internal factors. The external factors included the area condition and support from government authorities and other related agencies. The internal factors included the chairpersons of community enterprises or group leaders, management system, and behavior of community enterprise members. The human capital development approach of community enterprises in the sufficiency economy land settlements, agricultural reformed areas involved the training, learning, learning network creation, knowledge management, learning forum, studying from role models or model community enterprises, and self-learning. The factors/conditions allowing the practical implementation of human capital development approach included the analysis of community enterprise activities relevant to the

area condition, promotion and support by related government authorities and other government entities, chairpersons of community enterprises/ group leaders, and behavior of community enterprise members who spent the loans relevantly to the fund's objectives.

KEYWORDS: *human capital development, community enterprise, sufficiency economy land settlement, agricultural reformed area*

1.0 INTRODUCTION

In Thailand, most populations are farmers; therefore, land is the primary factor and base for the agricultural production. It is so essential that the state carries out the land reform to provide some land to these farmers, and to maximize the land utilization. Thus, the Agricultural Land Reform Act B.E. 2518 was enacted.

The government's policy and strategy according to the 4-year administration and government plan (Year 2005-2008) define the strategy of poverty elimination. Especially, the solution on individual poverty was emphasized. These individuals also included 6 million poor people in the agricultural sector. The Council of Ministers passed the resolution on 4 October 2005 to assign the Ministry of Agriculture and Cooperatives as the main entity to fight against the poverty, especially the allocation of land to the farmers registered as poor people. By this regard, the sufficiency economy land settlement was established and operated under the Principle of Sufficiency Economy initiated by His Majesty the King, and it is under the responsibility of the Agricultural Land Reform Office (ALRO).

The main objective of establishing the sufficiency economy land settlement is to solve the poverty by allocating land along with creating occupations for farmers so that they own some plots of land permanently and are self-reliant. The farmers may form the occupational groups, or they may establish the agricultural institutions in type of community

*The research has been supported by the Office of the Higher Education Commission (OHEC) for the fiscal year of 2012. The project number is 2555A1576/62025

**Khemapat Yenpiam is the research project head. Other research participants included Danusorn Kanjanawong, Somsak Charoenpul, Kulthida Phukang, and Sirima Suwansri, who are the permanent instructors of the Faculty of Humanities and Social Sciences, 295 Suan Dusit Rachabhat University, Rachasima Road, Dusit District, Bangkok 10300, and the research project consultants included Assoc.Prof.Dr. Siriporn Yennil who is the permanent instructor of the Faculty of Humanities and Social Sciences, 999 Mahidol University, Tambon Salaya, Putthamonthon District, Nakhon Pathom. Thailand

enterprise or cooperative. At present, the land reform offices at many provinces have promoted and encouraged the farmers to form groups in type of community enterprise. The low-interest loans shall be granted to the farmers for their community enterprise operations. Now, there are 36 sufficiency economy land settlements in total in 5 regions (Agricultural Land Reform Office, n.d.). At each sufficiency economy land settlement, many community enterprises are established; many of them engage the successful operations.

The Researcher previously conducted the research on Modes and Good Practice in the Implementation of the Principle of Sufficiency Economy for Community Business Management of sufficiency economy land settlements under the Working Plan in Studying and Improving the Community Business Management Models of Sufficiency Economy Land Settlement as subsidized and supported by the National Research Council of Thailand for the fiscal year of 2010. The results showed that the successful community enterprises have engaged good models and business management, which involved constant markets purchasing the output or products, good capital management and profit sharing, use of community resources in the production, network of knowledge sharing, leadership and good visions of group/ community enterprise leaders, good cooperation of group members, etc.

In contrast, the unsuccessful community enterprises have lacked the markets purchasing their output/ products, good capital management and profit sharing. Some community enterprises formed the group, but they had no serious operations until the group collapsed finally. Most importantly, these groups have lacked the human capital in producing goods, and succeeding their local wisdom. The current human capital has not yet engaged the development of knowledge, skills and abilities to create or add more product values.

From such conditions, the Research Team was interested in studying the factors influencing the human capital development of community enterprises in the sufficiency economy land settlements, agricultural reformed land in order to find out the human capital development approach of community enterprises in the sufficiency economy land settlements, agricultural reformed land.

1.1 Research Questions

- 1) What are the contexts of community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land?

- 2) In the past, how did the community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land develop the human capital?
- 3) Which factors affected the human capital development of community enterprises in the successful and unsuccessful sufficiency economy land settlements, agricultural reformed land?
- 4) Which means were used for the human capital development by community enterprises in the sufficiency economy land settlements, agricultural reformed land?
- 5) Which factors/ conditions making the human capital development approach of community enterprises in the sufficiency economy land settlements, agricultural reformed land be actually implemented?

1.2 Research Objectives

- 1) To study the contexts of community enterprises in both successful and unsuccessful sufficiency economy land settlements, agricultural reformed areas.
- 2) To study the human capital development of community enterprises in both successful and unsuccessful sufficiency economy land settlements, agricultural reformed areas.
- 3) To study factors affecting the human capital development of community enterprises in both successful and unsuccessful sufficiency economy land settlements, agricultural reformed areas.
- 4) To study the human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed areas.
- 5) To study factors/conditions allowing the practical implementation of human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas.

2.0 LITERATURE REVIEW

According to the literature review on concepts and theories relating to human capital, the concepts of this issue stated by academics may be divided into 5 following groups:

Group 1: The academics of this group including Edvinsson & Malone (1997), Dess & Pickens (1999), and Bohlander, and Snell, & Sherman (2001) defined the human capital as abilities, knowledge, skills, and experience of personnel in an organization, who create values for it.

Group 2 included Cortade & Wood (1999). It defined the human capital as accumulation of know-how value. Knowledge of personnel must be invested so that the organization's human capital is beneficial.

Group 3 is the academics' concept that the human capital is intangible assets. They included Davenport (1999) and Becker (1964). Devenport defined "human capital" as the intangible assets enabling persons to work, which included knowledge, skills, talent, and behavior. Becker viewed that the human capital is the intangible and immeasurable assets, but it may be used together with the intellectual capital. Human capital can create some value for an organization, e.g. knowledge, thought, and innovation.

Group 4 is the concept of Fitz-enz (2000) who explained that the "human capital" comprises several components such as:

- Personal specific characteristics in working or talent or expertise in working, attitude, and decision-making in working
- Abilities in learning and personal development
- Personal motivation in shared data and knowledge.

Group 5 is the concept of academics who integrated the concepts on human capital proposed by several academics. The academics of this group included Lengnick – Hall, Mark L. & Lengnick – Hall, Cynthia A. (2002), who defined the "human capital" as the integration of knowledge, skills, abilities, and other personal characteristics or this may be called "KSAOs", which are valuable and most beneficial to an organization. The meaning of each component is as follows:

- K – Knowledge about working issues
- S – Skills of what enables the personnel or staff to work
- A – Ability of a person to learn skills, which are actions originated from mind and body
- O – Other personal characteristics that include the attitude, belief, personal characteristics, emotions, mental condition, and self-esteem

From the academics' concepts proposed above, it could be concluded that the human capital is knowledge, skills, abilities, experience, and other characteristics such as attitude and belief currently existing in individuals working in an organization as it makes investment to create and accumulate knowledge until it becomes the know-how and intellectual capital so that those can work and add more value in work or products for that organization.

According to the definitions of human capital, the Research Team had the literature review about the human capital development approach. The following approaches were used in this research:

1) Human capital development approach by training. From studying the papers of Schultz (1961), Becker (1964) and De Cenzo and Robbins (1996), it could be concluded that the human capital development approach by training must consist of:

- 1.1 On the job training – This is the training on job and it is trained by the experts. It focuses on practice rather than theory.
- 1.2 Off the job training – This training is separated from the actual work, but controlled by the trainer; for example, delegating the personnel or staff to attend the training course at a specific agency responsible for the training on such production or service. This training also means the lecture, seminar, and learning from simulation.

2) Human capital development approach by creating the learning process at the community level and the community learning process based on the Sufficiency Economy. According to Vimolluck Chuchart (1997: 32), Anuchart Puangsamlee and Orathai Ard-am (1998: 249-250), Adul Wangsrikoon (2000: 25), Parichart Valaisathien (2000: 284-324), Soonthorn Sunanchai (2000, 39), Varunee Chinvinikul (2006), Atcharaporn Boonnamma (2009), Sumeth Promraksa (2007), Sanae Jina (2008), and Poonpol Lekmainoi (2008), it could be concluded that the methods of forming the learning process at the community level included the arrangement of libraries and information centers, training, educational visit, seminar, demonstration, experience sharing, and campaign forum. For the community learning process based on the Sufficiency Economy, the communities had the traditional or natural learning process, that is, they have succeeded the living based on the community concept or wisdom so that it was relevant to the concept of living based on the King's thought on sufficiency economy.

3) Human capital development approach by learning network creation. According to Bantorn Ondam and Parichart Valaisathien (2003: 14), Vimolluck Chuchart (1997: 36-37), Pan Kimpee (1997: 206), Anuchart Puangsamlee (2008: 250), Chantaranan Laopanna (2003), Saree Pongpis (2003: 212-213), Varee Thavornrungkij (2005), Kanchana Rodkaew (2007), and Surichart Jongjit (2007), it could be concluded that learning network creation could be done via the internal and external social network. The internal social network included relatives, neighbours, workers in the same occupation, and community leader. The external learning network involved groups of people, organizations, institutions or government authorities and private companies. The learning network creation consisted of the learning activities, e.g. preparation of community plan, arrangement of learning forum, demonstration, testing and practice, educational visit, training, meeting, and seminar, which needed the constant information sharing, mobilization and coordination for the use of resources, tools and equipment, building and budget, joint activities, joint working, management system, and establishment of organization network.

4) Human capital development approach by knowledge management. According to Soliman and Spooner (2000), Nonaka *et.al.* (2001), The Community Development Department (2005: 37), Waravut Planan *et.al.* (2006), Wannee Thongraya (2006), Usanee Uthapongda (2006), and Vallayaporn Tangsuphuti (2010), it could be concluded that the knowledge management process consisted of the following step. 1) Knowledge acquisition from compiling knowledge inside and outside the community. The knowledge acquired and compiled outside the community would push the community to obtain new knowledge to be linked with its traditional wisdom. 2) Knowledge documentation, e.g. transferring the individual knowledge talked to be tangible or in writing. 3) Knowledge storage by classifying, defining the important things to be stored as knowledge base, and considering the knowledge storage methods for further uses such as recording as knowledge base, book listing persons submitting knowledge inside and outside the community in each aspect, etc. 4) Knowledge creation, which is the combination of knowledge in order to create new things and implement it. 5) Knowledge application, which is the expansion of knowledge by implementing it or turning it to the real practice by consideration practice and problem-solving practice until it becomes the knowledge, and by self-improvement.

5) Community enterprise is an alternative small and medium-sized economic system on the principle of sustainable development. It focuses on grass-root or community-based economic development together

with holistic social and cultural development. The community income may be generated along with the community learning development while the local wisdom and natural resources are encouraged such as forest, agriculture and services in order to strengthen the community. The operational system is based on the participatory process starting from planning, implementation and distribution of benefits to all stakeholders (Seri Pongpit, 2008:53, Wichit Nantasuwana, 2004: 28, Jason Donovan Dietmar Stoian & Nigel Poole, 2008: 12)

From the literature review above and the Research Team's analysis, it was found that the theories, concepts and research relating to the human capital development were so duplicated; therefore, the Research Team analyzed the human capital development that was relevant to this research to be used as the guideline of analyzing this research. It was analyzed that the human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed land should be based on the following methods:

1) Training

- 1.1 On the job training – This is the training on job and it is trained by the experts. It focuses on practice rather than theory.
- 1.2 Off the job training – This training is separated from the actual work, but controlled by the trainer; for example, delegating the personnel or staff to attend the training course at a specific agency responsible for the training on such production or service. This training also means the lecture, seminar, and learning from simulation.

2) Traditional or natural learning by succeeding the living according to the concept or wisdom of community members.

3) Learning network creation via the internal and external social network. The internal social network included relatives, neighbours, workers in the same occupation, and community leader. The external learning network involved groups of people, organizations, institutions or government authorities and private companies. The learning network creation consisted of the learning activities, e.g. learning forum, demonstration, testing and practice, educational visit, meeting, and seminar.

4) Knowledge management

Knowledge management process consisted of the following step:

- 4.1 Knowledge acquisition from compiling knowledge inside and outside the community. The knowledge acquired and compiled outside the community would push the community to obtain new knowledge to be linked with its traditional wisdom.
- 4.2 Knowledge documentation, e.g. transferring the individual knowledge talked to be tangible or in writing.
- 4.3 Knowledge storage by classifying, defining the important things to be stored as knowledge base, and considering the knowledge storage methods for further uses such as recording as knowledge base, book listing persons submitting knowledge inside and outside the community in each aspect, etc.
- 4.4 Knowledge creation, which is the combination of knowledge in order to create new things and implement it.
- 4.5 Knowledge application, which is the expansion of knowledge by implementing it or turning it to the real practice by consideration practice and problem-solving practice until it becomes the knowledge, and by self-improvement.

3.0 METHODOLOGY

The research on Human Capital Development Approach of Community Enterprises in Sufficiency Economy Land Settlements, Agricultural Reformed Land was based on the qualitative approach relying on documents, articles, related researches, in-depth interview with key informants, and focus group.

3.1 Population and Research Respondents

The Research Team selected some sufficiency economy land settlements for this research. According to the data, there were 36 sufficiency economy land settlements in 5 regions. They were selected by considering the income, and by purposive sampling from those whose farmers earned more than Baht 4,500 per month or more than

Baht 50,000 per year up to the maximum criteria in 3 sufficiency economy land settlements (successful land settlements); namely, 1) Amphoe Sanam Chai Khet Sufficiency Economy Land Settlement, Chachoengsao Province, 2) Amphoe Phutthamonthon Sufficiency Economy Land Settlement, Nakhon Pathom Province, 3) Amphoe Muak Lek, Sufficiency Economy Land Settlement, Saraburi Province, and other sufficiency economy land settlements where farmers earned some income more than Baht 4,500 per month or more than Baht 50,000 per year up to the minimum criteria in 3 sufficiency economy land settlements (unsuccessful sufficiency economy land settlements); namely, 1) Amphoe Santisook Sufficiency Economy Land Settlement, Nan Province, 2) Amphoe Na Chueak Sufficiency Economy Land Settlement, Maha Sarakham Province, and Amphoe Kok Soong Sufficiency Economy Land Settlement, Sa Kaew Province.

To get the key informants in the in-depth interview, the sampling relied on the snowball technique by requesting the provincial land reform academics to select 3 community enterprises in the successful sufficiency economy land settlements, and 3 key informants from each community enterprise, as well as 3 community enterprises in the unsuccessful sufficiency economy land settlements, and 3 key informants. There were 18 key informants in total. The selection criteria for key informants were based on the information about the renewal of community enterprise registration, and the constant arrangement of activities in these sufficiency economy land settlements. The key informants had to be the chairpersons/ group heads of community enterprise or group committees of community enterprises.

The purposive sampling was selected from the agencies directly responsible for three sufficiency economy land settlements, agricultural reformed areas, which met the successful operations, and 2 officials were selected from each of them. These officials were the academic from the Provincial Land Reform Office, and the academic from the District Agricultural Extension Office. The purposive sampling was also used to select another three sufficiency economy land settlements, agricultural reformed areas, which met the unsuccessful operations, and 2 officials were selected from each of them. Finally, there were 12 key informants who were the state sector's officials.

Moreover, the Research Team selected another 3 academics with expertise in human capital to verify and give opinions about the human capital development approach of community enterprises in sufficiency economy land settlements.

3.2 Research Instrument

The instrument for field data collection was the in-depth interview with key informants. The in-depth interview with the chairpersons/ head of community enterprises dealt with the background of group establishment, group management, operating results, promotion and support by related agencies, methods of human capital development, as well as problems and hindrance of human capital development. The in-depth interview with the officials of other related agencies dealt with the promotion and support to community enterprises, problems and hindrance of promoting and supporting for the human capital development to community enterprises, methods of human capital development, as well as problems and hindrance of human capital development.

The focus group was done to verify the accuracy, appropriateness, and suggestions about the human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed areas. In addition, those questions used as the guideline of in-depth interview and focus group were previously checked and commented on their appropriateness and validity by 3 qualified experts.

3.3 Data Collection

1) Prior to the field data collection, the Research Team had the literature review in order to set up the conceptual framework, instrument for data collection, and methodology, which all were checked by the qualified experts/ academics for the validity before being improved and used in the field.

2) The Research Team contacted the community enterprises in all 6 sufficiency economy land settlements, agricultural reformed areas, and related agencies promoting and supporting the community enterprises in sufficiency economy land settlements, agricultural reformed areas in order to make appointments, time and venue for the data collection.

3) The Research Team collected the data with the community enterprises in sufficiency economy land settlements, agricultural reformed areas, and the related agencies promoting and supporting the community enterprises in those 6 sufficiency economy land settlements, agricultural reformed areas.

3.4 Data Analysis

The data analysis of this research involved 3 methods:

- 3.4.1 Content analysis – The data compiled was analyzed, classified, and synthesized to be presented in the descriptive form that explained those phenomena.
- 3.4.2 Analytic induction – This is to interpret and create the conclusion from the tangible data and events or phenomenon discovered. Some more data may be compiled or something may be carried out to test the hypothesis before being analyzed to find out the conclusion.
- 3.4.3 Typology and taxonomy – This is to classify and systemize the data.

3.5 Data Validation

The Research Team conducted the data validation for data reliability and accuracy by using the data triangulation as per the following steps:

- 3.5.1 Data triangulation regarding the methodological triangulation. The data of the same issue was collected by using several data collection methods, e.g. in-depth interview, non-participatory observation, and confirmation from documents.
- 3.5.2 Data triangulation regarding data sources. The data was collected from different data sources, time and place to verify the data accuracy and reliability.
- 3.5.3 Reliability. The researcher used the techniques making the research most reliable, that is, the conceptual framework was concisely set up; various data collection methods were used; reliable data sources were considered; data was checked with the data owners and related persons (cross check) that could be verified (audit trial) by using the data compiled for this research.

4.0 RESULTS

The Research Team proposed the research results to respond to the research objectives as follows:

1) The contexts of community enterprises in both successful and unsuccessful sufficiency economy land settlements, agricultural reformed areas.

The results showed that community enterprises in both successful and unsuccessful sufficiency economy land settlements, agricultural reformed areas were promoted and supported for low-interest loans by the Provincial Land Reform Office. Some government entities provided the tools and raw materials for the community enterprises' production, as well as the budget for the construction of goods production and distribution center. In addition, these community enterprises were supported for marketing and technical knowledge, e.g. coordination for training instructors, arrangement of learning forum, establishment of learning center, etc.

2) Human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas.

The results showed that, previously, human capital development of community enterprises in both successful and unsuccessful sufficiency economy land settlements were promoted and supported similarly and differently as illustrated in table 1.

Table 1: human capital development of community enterprises in both successful and unsuccessful sufficiency economy land settlements

Human Capital Development	Community Enterprises in Successful Sufficiency Economy Land Settlements	Community Enterprises in Unsuccessful Sufficiency Economy Land Settlements	Comparison on Human Capital Development
1. Training	Obtaining on-the-job training and off-the-job training	Obtaining on-the-job training and off-the-job training	Community Enterprises in Successful Sufficiency Economy Land Settlements got the on-the-job training from the group chairpersons who had the local wisdom.
2. Learning	Government entities allocated some budget to have the educational visits. The group chairpersons and members combined their local wisdom with new knowledge got from the training and educational visit to have self-learning before transferring it to other members, and all had testing together.	Most members of community enterprises learned from their own practice, attended the training, listened to the lecture and workshop, and had educational visits at successful community enterprises. They were supported by the provincial land reform offices.	community enterprises in the successful Sufficiency Economy Land Settlements, the community enterprises' chairpersons transferred their knowledge to the members for further co-testing and practice.

3. Learning network creation	Being the learning center to be visited and learnt by other famers, and also learning with other farmers at other external learning center. In addition, the government entities also encouraged these community enterprises to attend meetings, seminars, educational visits with other successful networks.	Most members of community enterprises were neighbours and workers in the same occupation. They usually discussed about the problems and solutions of doing activities of community enterprises together.	community enterprises in the successful sufficiency economy land settlements created their learning network inside and outside while the community enterprises in unsuccessful sufficiency economy land settlements had no learning network creation outside
4. Knowledge management	Knowledge management was done pursuant to the following steps: 1. Knowledge acquisition 2. Knowledge documentation	Knowledge management was done pursuant to the following steps: 1. Knowledge acquisition 2. Knowledge documentation	community enterprises in successful sufficiency economy land settlements acquired the partial knowledge by themselves while the unsuccessful ones
	3. Knowledge storage 4. Knowledge creation 5. Knowledge application	3. Knowledge storage 4. Knowledge creation 5. Knowledge application	preferred that the government entities supported some knowledge for them. For other steps, both types of community enterprises were similar; especially knowledge storage, that is, most community enterprise members had no knowledge records, but relied on their memories.

3) Factors affecting the human capital development in sufficiency economy land settlements, agricultural reformed areas

The results showed that the factors affecting the human capital development in sufficiency economy land settlements, agricultural reformed areas consisted of internal and external factors. The external factors were uncontrollable; meanwhile, the internal factors were derived from those community enterprises. The research results were presented in the table 2

Table 2: The factors affecting the human capital development in sufficiency economy land settlements, agricultural reformed areas

Factors affecting human capital development	community enterprises in successful sufficiency economy land settlements	community enterprises in unsuccessful sufficiency economy land settlements
	<p>The group chairpersons have engaged some knowledge base or local wisdom, and also acquired other knowledge continuously. This knowledge was transferred to other members for joint practice.</p>	<p>Members of community enterprises spent the loans granted as per the loan objectives, contributed time to join the group activities, acquired knowledge continuously, had efforts and enthusiasm, applied their local wisdom for the production, had responsibility, sacrifice, honest, fairness, and had self-reliance.</p>
	<p>Members of community enterprises did not spend the loans granted as per the loan objectives, had no time to join the group activities, did not change their thought, relied on memories rather than records, did not apply what they got from training or educational visits, had no effort and enthusiasm, and did not succeed their local wisdom.</p>	
	<p>They had good management system in term of production, marketing, and income management as resulted by the group chairman's leading who had knowledge about production, sources of output or product distribution, pricing, and fair allocation of income.</p>	<p>The agencies directly responsible for methods of human capital development have promoted and supported these community enterprises, but the external community network creation and arrangement of learning forum was not explicit.</p>

Factors affecting human capital development	community enterprises in successful sufficiency economy land settlements	community enterprises in unsuccessful sufficiency economy land settlements
	The group chairpersons have engaged some knowledge base or local wisdom, and also acquired other knowledge continuously. This knowledge was transferred to other members for joint practice.	Members of community enterprises spent the loans granted as per the loan objectives, contributed time to join the group activities, acquired knowledge continuously, had efforts and enthusiasm, applied their local wisdom for the production, had responsibility, sacrifice, honest, fairness, and had self-reliance.
	Members of community enterprises did not spend the loans granted as per the loan objectives, had no time to join the group activities, did not change their thought, relied on memories rather than records, did not apply what they got from training or educational visits, had no effort and enthusiasm, and did not succeed their local wisdom.	

4) Human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed areas
The results showed that the human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed areas comprised:

1) Training

The training for human capital development of community enterprises in sufficiency economy land settlements should comprise both on-the-job training and off-the-job training. For the former, the training instructors may be the group chairpersons who have engaged some local wisdom or experience, or they may be other farmers successful in their careers, or agricultural academics. Other related government agencies may provide some external instructors with knowledge and expertise to conduct the practical training courses for the community enterprise members. For the latter, the related government agencies may provide some instructors with knowledge and expertise, or may encourage the members to attend the training courses with other external agencies. Sometimes, the learning forum may be arranged by the academics where the farmers could share their knowledge and experience.

2) Learning

The human capital development approach by learning to be applied in the human capital development of community enterprises in sufficiency economy land settlements had to be carried out by the group chairperson whereas the members combined their local wisdom with some new knowledge obtained from training and educational visit before transferring it to other members, and had practice together. In addition, the government agencies gave some budgets for educational visits at successful model community enterprises/communities. Learning outside the community not only gives some more knowledge and experience, it widens the vision for all community enterprise members.

3) Learning network creation

The human capital development approach by learning network creation to be applied in the human capital development of community enterprises in sufficiency economy land settlements had to be carried out by the related government agencies that encouraged the community enterprise groups to attend meetings and seminars, and had educational visits at the successful network. As a result, they could meet and share knowledge with other community enterprises. However, some community enterprise groups whose chairpersons/group leaders are good may create the network for the group, which leads to the meetings and discussions between group members until they have cooperation and knowledge sharing with each other finally.

4) Knowledge management

The human capital development approach relied on the following process:

1. Knowledge acquisition. The community enterprises acquired knowledge from their practice and from training in their own area, e.g. community learning center, training instructors provided by government agencies, and educational visit outside the community with local philosophers.
2. Knowledge documentation. The community enterprises took the knowledge and experience from testing and practice, self-learning, training, and network to share their learning together in the learning forum.
3. Knowledge storage. The contents from talks and shared learning in the learning forum were compiled and organized to be the knowledge base before being summarized in documents or rules to be complied with.
4. Knowledge creation. The contents summarized in documents

or rules were practised and learned together until the community obtained new discoveries and knowledge base.

5. Knowledge application. Members of community enterprises implemented the new knowledge base discovered from their testing and practice to develop the output or products to meet the standard.

5) Learning forum

The human capital development approach by arranging the learning forum is a way allowing community enterprise members in the same occupation to meet with each other. This learning forum was initiated by land reform or agricultural academics and they were the first instructors for this process or coordinated to provide other external instructors with knowledge and expertise. By this regard, the community enterprise members could share their knowledge and experience. Such sharing helps disclose the persons with specific expertise; for example, rice growing expert, bio-fertilizer production expert, insect and bug elimination expert, etc. These experts have engaged some local wisdom, and transferred their experience and information to other members. After that, the process instructors would summarize and provide more advice to the community enterprise members who would further apply such shared and learnt knowledge in their community enterprise activities. Apart from new knowledge base, these community enterprise members also obtained the network comprising certain persons in the same occupation. This way helps solve a problem that the farmers/ community enterprise members dare not to raise any questions if the training is coordinated by academics or trained by experts. Or, sometimes, the practice is complicated, difficult and hard to be memorized, which cause the farmers reject the learning and implementation.

6) Studying from role models or model community enterprises

For this human capital development approach, the related government agencies took the community enterprise members to visit the successful community enterprises in other areas, or the role models with specific expertise were invited to share some knowledge with the community enterprise members in type of learning forum.

7) Self-learning

When the community enterprise members had self-learning and mutual practice, they would get a solution or new knowledge base. The key informants who were representatives of community enterprises gave opinions that this method was an efficient method whereby 1) community enterprise chairpersons and members had to acquire

knowledge continuously, 2) community enterprise chairpersons and members had to be open-minded to accept other persons' opinions or knowledge base or new innovations, and 3) if this method were used along with the knowledge management process, it would be efficient. However, the problems were: 1) community enterprise chairpersons and members did not acquire knowledge continuously, 2) community enterprise chairpersons and members were not open-minded to accept other persons' opinions or knowledge base or new innovations, and 3) community enterprise members transferred the knowledge from their memories only; they have never summarized or systemized their knowledge.

From data analysis to propose the human capital development approach, the overall strength and factors of human capital development methods are presented in table 3

Table 3: Strength and problems/hindrane of human capital development methods

Human capital development methods	Human capital development approach	Strength	Problems/Hindrane
Training	Both on-the-job training and off-the-job training were used.	Learning by doing from experts.	- Limited budgets - Members had no time - Members did not apply it. - Members prefer memorizing to recording.
			- Members dared not to raise questions. - Methods were difficult and complicated to be memorized.
Learning	- Community enterprise chairpersons/ group leaders transferred their local wisdom or traditional knowledge base to the members. - Agencies encouraged them to have educational visits.	- Rapid, easy to be memorized, no time consuming, practical. - Open the vision.	- Depending on memories rather than records; so the transfer might be incomplete. - Sometimes, the educational visits could not be beneficial.

Human capital development methods	Human capital development approach	Strength	Problems/Hindrance
Network creation	- Related government agencies encouraged the community enterprises to attend meetings, seminars, and educational visits at other successful network. Relying on the coordination of community enterprise chairpersons/ group leaders.	- Rapid, easy to be memorized, no time consuming, practical.	- Community enterprise chairpersons/ group leaders had good coordination. - Related government agencies had no coordination.
Knowledge management	It relied on the following process: 1. Knowledge acquisition 2. Knowledge documentation 3. Knowledge storage 4. Knowledge creation 5. Knowledge application	- This is to interpret the individuals' tacit knowledge into the explicit knowledge, which would lead to knowledge for the output or product development.	- Process instructors might lack some knowledge and understanding about the arrangement of learning forum and knowledge management process. - Members preferred memorizing to recording; so it was difficult to turn the tacit knowledge into the explicit knowledge.
Learning forum	Community enterprise members in the same occupation could meet and discuss together.	- Members dared to share opinions. - Obtaining some new networks. - Rapid, easy to be memorized, no time	Members did not open their mind to accept other people's opinions or new knowledge base or innovations.
		consuming, practical.	
Studying role models or model community enterprises	Related government agencies took the community enterprise members to visit some successful community enterprises, or invited certain role models with specific expertise to share the knowledge with these community enterprise members.	- Rapid, easy to be memorized, no time consuming, practical.	For the educational visit, the community enterprise members might not apply it.

5) Factors/conditions allowing the practical implementation of human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas

The results showed that the factors/conditions allowing the practical implementation of human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas included the analysis of community enterprise activities to be relevant to particular areas, and promotion and support

by related government agencies and other government agencies. In particular, the academics should perform duties of monitoring, asking for problems and needs of community enterprise members consistently, be the thought leaders by seeking for some information to spark those members' ideas, provide some advice to the community enterprise members, coordinate with the instructors who may be the academics or philosophers giving some knowledge relevantly to the problems and needs of community enterprise members, and coordinate for budgets supported by other agencies. The human capital development methods must come from the group chairperson or leader, and be supported by any related government agencies.

Moreover, the community enterprise chairperson or group leader was an important factor enabling the group development or group activities. For the characteristics of community enterprise chairpersons/group leaders, they were not only the thought leaders, acquire some knowledge, and coordinate, they were the good models for their members, e.g. diligence, patience, sacrifice, contribution, honest, and fairness, etc. Also, a good management system should be rooted. The loans took out by the members had to be spend relevantly to the fund's objectives. Moreover, the community enterprise members necessarily had abilities in applying the local wisdom or original knowledge in the production or development of community enterprise activities. The members had to contribute time to do the group activities, open to new knowledge, and had efforts and enthusiasm. Importantly, the community enterprise members had to acquire some more knowledge or information consistently, have responsibility and sacrifice, comply with rules, maintain the production steps and methods to meet the agreed quality and standards, allocate the income and other benefits fairly, and rely on themselves rather than help from the government agencies.

4.1 Discussion

According to the result finding that the factors affecting the human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas might be divided into internal and external factors. The external factors, which were uncontrollable, included the area condition, regular promotion and support by relevant government agencies, and promotion and support by other agencies. The internal factors involved the community enterprise chairpersons/group leaders, management system, human capital development methods, and behavior of community enterprise members. The external factors enabled the community enterprises to

carry out the activities. The community enterprises' activities could be carried out consistently due to such internal factors. Therefore, it could be concluded that the successful human capital development depended on both external and internal factors, which resulted to the human capital development. From such research results, the Research Team viewed that they were relevant to Jaimanus Ploydee (1997: 151-156) who studied the Factors Affecting Success and Failure of Community Business in Macro and Micro Comparison: Case Study of Amphoe Khum Khuaen Khaew of Yasothon Province, and Amphoe Lan Sapha of Nakhon Si Thammarat Province. In conclusion, the important factors affecting the success and failure involved the participation factor, leadership factor, membership factor, financial factor, external interactive factor, management factor, production factor, marketing factor, labour factor, information factor, and rules factor.

For the human capital development approach discovered by the Research Team was the human capital development by training. The community enterprise members should obtain both on-the-job training and off-the-job training. For the on-the-job training, the training instructors may be the group chairpersons who have engaged some local wisdom or experience, or they may be other farmers successful in their careers, or agricultural academics. Other related government agencies may provide some external instructors with knowledge and expertise to conduct the practical training courses for the community enterprise members. For the off-the-job training, the related government agencies may provide some instructors with knowledge and expertise, or may encourage the members to attend the training courses with other external agencies. Both on-the-job training and off-the-job training needed some budgets for arrangements. This is a kind of investment to add knowledge, skills, competence, and attitude of community enterprise members for further development of community enterprise activities. The human capital development approach by training is relevant to the concept of Becker (Becker as cited in Maran Marimuthu, Lawrence Arokiasamy & Maimunah Ismail, 2009: 267) who gave a viewpoint that the training is the most important investment in human capital development. This concept is also relevant to Swanson (Swanson, 2001: 285-295) who created the model of human capital theory. He explained that, for investment in education and training, the outcome is the increased knowledge. The increasing learning results to higher output. When the output increases, the result is that each one gets higher salary, and the organization receives higher operating results. Such relationship leads to a conclusion that the human capital makes benefits and profits to the organization.

The next approach is the human capital development by learning to be used in the human capital development of community enterprises in the sufficiency economy land settlements. This approach had to be carried out by the group leaders while the members combined their traditional wisdom with the new knowledge obtained from any training, educational visits, and self-learning before transferring such combined knowledge to other members, and practising together. This learning approach also involved the budget support by the government agencies to the community enterprises for the educational visits at the successful model community enterprises/communities. Learning outside the community not only gives some more knowledge and experience, it widens the vision for all community enterprise members. By this approach, the members received both transferred local wisdom and new knowledge base from training, educational visit, and self-learning. They, finally, discovered the new knowledge base to be used in the development of community enterprise output or products. This human capital development approach is also relevant to Acharaporn Boonnamma (2009) on Knowledge Base Creation by Local Wisdom Scholars in respect with Sufficiency Economy. Her result showed that the local wisdom scholars created the knowledge base by their own ideas after they have learnt various problems and applied such knowledge in the community. This knowledge has been transferred from the ancestors up to now. The elements relating to the knowledge base creation consisted of humans, nature, and environment, which all are blended harmoniously and gradually depending on the characters and location of that particular community. The application of local wisdom regarding economics included the production of bio-fertilizer, production of wood vinegar to drive out insects, using herbs as medicine, etc. The communities have well applied the Principle of Sufficiency Economy with their local wisdom. For the social aspect, the local wisdom has been applied to enhance the good cooperation between community people.

The human capital development approach by learning network creation had to be carried out by related government agencies by encouraging various community enterprise groups to attend the meetings, seminars, and educational visits at other successful networks, which give chance to the community enterprise members to share their learning. However, the community enterprise chairpersons/group leaders of some community enterprises may have the coordination skills, so they may create the network for their group, which will lead to the meeting and discussion between group members, and the cooperation and knowledge sharing finally. The network creation approach provokes the creation of social capital, which allows people to meet and talk

until they have the shared learning with each other to be further used in the development of community enterprise activities. This finding is relevant to the researcher working for the Research and Development Institute, Khon Khen University (1997: 113) who said that the learning network is a learning network/development activity occurred at the initial stage, which may have 2 types. The first type is the natural type, that is, when a community is able to develop the community activities, and to solve its problems, other neighbouring communities will come to learn and apply such model and method for their own communities. Another type is the established network when an organization wants to expand its operating area; so it visits any existing communities with some experience and lessons in the development process, and shares the experience with them.

The human capital development approach by knowledge management by 1) community enterprise members acquire the knowledge and share it in the learning forum, 2) knowledge base discussed and shared in the learning forum is compiled and organized in form of documents or rules to be complied with together, not only depending on memories and transfer, 3) what summarized in form of documents and rules are practised and learnt together until the members discover new knowledge base, 4) community enterprise members apply the new discovered knowledge base to their output or product development to meet the quality and standard, and 5) arrangement of learning forum in which the knowledge management process must be held and led by the process instructors, initiated and advised for the use of knowledge management methods in the learning forum by academics. Knowledge management is to systematically interpret individuals' tacit knowledge to be the explicit knowledge that will be used for the output or product development. This finding is relevant to Wannee Thongraya (2006) who conducted the study on Knowledge Management Process in Changing Farmers' Behavior in the Use of Chemicals: Case Study of Farmer School under the Royal Initiative at Baan Lan, Moo 4, Tambon Tha Chanuan, Amphoe Manorom Chai Nat. The results concluded that the knowledge management process consisted of: 1) external perception; 2) personal learning; 3) connection the external knowledge with the community traditional wisdom; 4) real testing and practice; 5) selection of practical knowledge; 6) setting of learning sources for outsiders; and 7) information storage.

The human capital development approach by learning forum allows the community enterprise members in the same occupation to meet and share their learning. By this approach, the community enterprise members can apply what they share to their community enterprise

activities. Apart from getting some new knowledge base, the community enterprise members obtain the network containing people at the same occupation. Another approach is to study the role models or model community enterprises. By this, the community enterprise members may have some educational visits or invite any role models with specific expertise to have the shared learning with community enterprise members in form of learning forum. Both approaches are consistent with the human capital development concept of Lynda Gratton & Sumantra Ghoshall (Lynda Gratton & Sumantra Ghoshall, 2003: 1-10) who explained that the intellectual capital means an individual's basic characteristics such as complication of talent and learning abilities along with tacit knowledge and external knowledge, skills, and experience each has created along his/her working life. The social capital means the network of relationship provoking the access to the resources the members of that network own or can access. This relationship is dynamic, both giving to and receiving from others. This helps each person develop his intellectual ability by accessing to knowledge and skills occupied by those persons. The emotional capital means self-confidence deriving from self-esteem, prestige, brave and flexibility that each individual must share knowledge and relationship efficiently.

Moreover, such approach is relevant to the research result of Varee Thavornrungskij (2005) on Learning Network of Farmers in Rural Communities in Doing the Second Occupation. She found that 1) learning network of farmers in rural communities in doing the second occupation was the learning network via social network inside and outside the Community, 2) farmers' learning network doing the second occupation in rural communities was the relationship between experienced farmers, 3) learning network of farmers in doing the second occupation came from several factors and most factors dealt with those farmers, including social and environmental factors, e.g. family, relatives and peer, economic readiness, and personal factors, e.g. habit encouraging the occurrence of learning network, needs for knowledge and information, occupational skills and experience, marketing and sales needs, as well as length and frequencies the farmers had meetings. In addition, the mass media, e.g. radio, television, newspaper, and printed media, and the promotion process from various organizations in the state and private sectors were the important factors promoting and encouraging the farmers doing the second occupation in rural areas to share learning or acquire more knowledge to do their second occupation.

As the community enterprise members had self-learning and joint practice until they got the conclusion or finding to be the knowledge base from their practice, this is relevant to Anuchart Puangsamlee and Orathai Ard-um (2008), Soonthorn Sunanchai (2000), Adul Wangsrikoon (2000) who gave the same concepts about learning that learning helps shift the level of talent in individuals and communities or this is the interactive learning through action. In other means, this learning process is the learning-by-doing. The joint discussion through local forums leads to the learning process, comprising problem analysis and synthesis, selection of solutions, selection of appropriate alternatives, activity creation, and activity evaluation.

4.2 Conclusion

The human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas, depended on external and internal factors. The external factors, which were uncontrollable, included the area condition resulting to both production and marketing of these community enterprises, promotion and support by relevant government agencies and other agencies in part of capital, marketing, network creation, technical support, and visits to monitor and question about any problems and needs. These actions must be based on consistency and integrated working. In addition, other agencies may be coordinated to give more supports to these community enterprises. The internal factors involved the community enterprise chairpersons/group leaders who must be the thought leaders, acquire the knowledge regularly, and coordinate with any agencies inside or outside their area. The group leaders with knowledge base or local wisdom and constant knowledge acquisition must transfer their knowledge to other members for joint practice. In addition, the loans took out by the members had to be spend relevantly to the fund's objectives. The community enterprise members must acquire the knowledge consistently, have efforts and enthusiasm, have abilities in applying the local wisdom in their production, have responsibility, sacrifice, honest, fairness, and self-reliance, and have the good management system in their production, marketing and income management. Anyway, the group chairpersons must have some knowledge about production, output or product distribution sources, pricing, and fair income allocation.

Moreover, for the human capital development of community enterprises in sufficiency economy land settlements, agricultural reformed areas, the following methods may be applied: 1) training, either on-the-job training or off-the-job training; 2) learning; 3) learning network creation;

4) knowledge management; 5) learning forum; 6) studying role models or model community enterprises; and 7) self-learning. Each method contains specific strength and weakness as proposed earlier.

Importantly, to apply each approach, the following factors/conditions must be considered: doing the group activities must rely on the area and marketing analysis; consistent promotion and support from the government agencies and other agencies; community enterprise chairperson or group leader must be the thought leaders and good models for their members while they must have abilities in coordinating with any agencies inside and outside their areas; community enterprises must have the good management system, etc. The human capital development methods must rely on the group chairpersons or leaders, and support from any related government agencies. In addition, the loans took out by the members had to be spend relevantly to the fund's objectives. The community enterprise members must acquire the knowledge consistently, regularly take records, open mind to new knowledge, have efforts and enthusiasm, responsibility, sacrifice, honest, fairness, self-reliance, and time-contribution.

4.3 Recommendation

4.3.1 Policy recommendations

1) Policy continuance carried out by executives of the Agricultural Land Reform Office

The policy continuance carried out by the executives of the Agricultural Land Reform Office results to the continuous promotion and support to these community enterprises, especially to the implementation of policy placed by the Provincial Land Reform Office because the working in these areas is continuous. Although the executives may be reshuffled, the policy of community enterprise promotion and support must be continuous.

2) The farmers should be involved in driving the community enterprises in sufficiency economy land settlements in the levels of policy setting and practice. The network of community enterprises in sufficiency economy land settlements, agricultural reformed areas, may be established in order to work with all related government agencies.

3) Working coordination and integration

To promote and support the community enterprises in sufficiency economy land settlements, agricultural reformed land, the related government agencies and mechanism of community enterprise network,

which may be newly established, must coordinate and integrate with each other, especially in the preparation of working plans/projects.

4) Participatory preparation of working plans/projects

The community enterprise representatives in sufficiency economy land settlements, agricultural reformed areas, should take part in proposing any information, problems, and actual needs to be used by the government agencies in preparing the working plans/projects relevant to these community enterprises' problems and needs. The government agencies may also use such information to coordinate and integrate for the preparation of working plans/projects.

4.3.2 Practice recommendations

1) Doing group activities must rely on the analysis of area and market
From the findings of this research, it is apparent that, for the unsuccessful community enterprises, the community enterprise types, characteristics/activities were not relevant to the area condition. Therefore, before establishing any community enterprise, the area and market should be analyzed first.

2) Screening community enterprise activities

Based on the first recommendation, apart from the area analysis, before approving any loans, the community enterprise activities must be analyzed first, especially the probability of operating the community enterprise.

3) Providing knowledge and understanding to farmers

One important thing is to provide knowledge and understanding to the farmers about community enterprise and community enterprise management before establishing any community enterprise and taking out loans.

4) Coordination

The academics in these areas should perform duties of monitoring, asking for problems and needs of community enterprise members consistently, be the thought leaders by seeking for some information to spark those members' ideas, provide some advice to the community enterprise members, coordinate with the instructors who may be the academics or philosophers giving some knowledge relevantly to the problems and needs of community enterprise members, and coordinate for budgets supported by other agencies.

5) Implementation of human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed land.

The human capital development approach of community enterprises in sufficiency economy land settlements, agricultural reformed land, must be implemented, especially unsuccessful community enterprises. The research team has already analyzed the factors/conditions as well as problems and hindrance of each approach, which may be considered to further improve the models and methods of development the community enterprise members of each community enterprise.

REFERENCES

- Acharaporn Boonnamma. (2009). *Knowledge Base Creation of Local Wisdom Leaders regarding Sufficiency Economy*. Term Paper of the Master of Arts. The National Institute of Development Administration. Bangkok: The National Institute of Development Administration.
- Adul Wangsrikoon. (2000). *Synthesis of Research regarding Community Learning Process Strengthening the Community*. Doctoral Dissertation. Educational Development. Faculty of Education, Chulalongkorn University. Bangkok: Chulalongkorn University.
- Agricultural Land Reform, Office. (ALRO). Sufficiency Economy Land Settlement in Agricultural Reformed Area. Retrieved May 19, 2010 Web site <http://www.alro.go.th/alro/project/settlement/index.htm>.
- Anuchart Puangsamlee and Orathai Ard-am. (2008). *Development of Indicators for Thai Quality of Life and Society*. Bangkok: The Thailand Research Fund.
- Becker. (1964). *Human capital: A theoretical and empirical analysis*. New York: National Bureau of Economic Research.
- Cortade & Wood. (1999). *The knowledge management yearbook 1999 – 2000*. Boston: Butterworth-Heineman.
- Davenport. (1999). *Human Capital. Management Review*, 88(11), 37 – 42.
- De Cenzo and Robbins, S.P. (1996). *Human resource management* (5th ed.). New York :John Wile.
- Dess, G.G. & Pickman, J.C. (1999). Beyond productivity: How leading companies achieve superior performance by leveraging their human capital. *American Management Association*, 8.
- Edvinsson & Malone. (1997). *Intellectual capital: Realizing your company's true value by finding its hidden roots*. New York: Harper Business.

- Fitz-enz. (2000). The ROI of human capital measuring the economic value of employee performance. New York : AMACOM, American Management Association.
- Gratton, L. & Ghoshell, S. (2003). Managing personal human capital: New ethos for the “volunteer”employee. *European Management Journal*, 21(1), 1-10.
- Jaimanus Ploydee. (1997). *Factors Affecting Success and Failure of Community Business: Macro and Micro Comparison (Amphoe Khum Khuaen Khaew of Yasothon Province, and Amphoe Lan Sapha of Nakhon Si Thammarat Province*. Thesis of the Master of Economics, Chulalongkorn University. Bangkok: Chulalongkorn University.
- Marimuthu, M., Arokiasamy, L. & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from development economics. *Journal of International social Research*, 2(8), 267.
- Nonoka, I., Konno, N. & Toyoma, R. (2001). *Emergence of Ba: A conceptual framework for the continuous and self-transcending process of knowledge creation*, in Nonoka, I. & Nishiguchi, T.(Eds). *Knowledge emergence: Social, technical and evolutionary dimensions of knowledge creation*. New York: Oxford University Press.
- Pan Kimpee. (1997). *Development of Learning Network in the Informal Education for Community Self-Reliance*. Thesis of the Doctorate, Educational Development, Faculty of Education, Chulalongkorn University.
- Parichart Valaisathien et.al. (2003). *Process and Working Techniques of Developers. Learning Promotion for Happy Community Project (Sor.Ror.Sor.)*. Bangkok: Usa Publishing.
- Vimonluck Chuchart. (1997). *Presentation of Models of Learning Network Creation Process for the Conservation of Forest Resources*. Doctoral Dissertation, Educational Development, Faculty of Education, Chulalongkorn University. Bangkok: Chulalongkorn University.
- Wannee Thongraya (2006). *Knowledge Management Process in Changing Farmers' Behavior in the Use of Chemicals: Case Study of Farmer School under the Royal Initiative at Baan Lan, Moo 4, Tambon Tha Chanuan, Amphoe Manorom Chai Nat*. Thesis of the Master of Community Development. Thammasat University. Bangkok: Thammasat University.
- Waree Thavornrungskij. (2005). *Learning Network of Farmers in Rural Communities in Doing the Second Occupation*. Thesis of the Master of Education. Chiang Mai University. Chiang Mai: Chiang Mai University.
- Research and Development Institute, Khon Khen University. (1997). *Community Organization as Mechanism for Social Solutions and Development*. Bangkok: The Thailand Research Fund.

- Sanae Jina. (2008). *Development of Learning of Baan Ta Van Community Based on the Principle of Sufficiency Economy*. Thesis of Master of Science. Mae Jo University. Chiangmai: Mae Jo University.
- Saree Pongpis. (2005). *Network: Strategy for Intensive Community, Strong Community = Network*. Bangkok: Community Enterprise Promotion Institution.
- Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 1(2), 1-17.
- Soliman, F. & Spooner, K. (2000). Strategies for implementing knowledge management: Role of human resources management. *Journal of Knowledge Management*, 35 (3), 476-504.
- Soonthorn Sunanchai. (2000). *Concepts of Learning Network Development*. Bangkok: Amarin Printing.
- Sumeth Promraksa. (1997). *Learning Development of Baan No Lae Based on the Principle of Sufficiency Economy*. Thesis of Master of Science. Mae Jo University. Chiangmai: Mae Jo University.
- Surichart Jongjit. (1997). *Learning Network Development Guideline for the Development of Community Alternative Energy*. Thesis of Master of Education. Chulalongkorn University. Bangkok: Chulalongkorn University.
- Swanson, R.A. & Holton, E.F. (2001). Foundation of human resource development. *Human Resource Development Quarterly*, 9(3), 285 – 295.